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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/592,841	06/13/2000	James L. Jason, Jr.	219.38418X00	5195

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EXAMINER

DINH, MINH

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 07/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/592,841

Applicant(s)

JASON, JR., JAMES L.

Examiner

Minh Dinh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date, 20050615.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the RCE filed 04/27/2005. Claims 1-27 have been amended.

Response to Arguments

2. Applicant's arguments filed 04/27/2005 have been fully considered but they are not persuasive. Applicant argues that Attwood does not disclose stopping packets from being transmitted before necessary security association for the packets is obtained. Attwood (6,347,376) discloses stopping packets from being transmitted before necessary security association for the packets is obtained (figure 8, steps 819, 821).

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 18 and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 2, it is not clear how a security association comprises an IKE component. The claim is interpreted as "wherein negotiating for a security association is performed by an IKE component".

Claim 18 recites the limitation "the network flow information" in line 2. There is insufficient antecedent basis for this limitation in the claim. The limitation is interpreted as "network flow information".

Claim 21 recites the limitation "the security association negotiation component" in line 2. There is insufficient antecedent basis for this limitation in the claim. The limitation is interpreted as "a security association negotiation component".

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Attwood et al (6,347,376) in view of Nikander et al (6,252,321).

Regarding claims 1, 17 and 20, Attwood discloses a method comprising intercepting a Transmission Control Protocol (TCP) connection request by an application (col. 3, lines 34-40; col. 8, lines 57-59), verifying if a security association to protect network flow associated with the connection has been established, allowing the TCP connection request to proceed if a security association for the connection has been established (fig. 11, step 1110; fig. 8, step 826) and stopping the TCP connection request to proceed if a security association for the connection has not been established

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(fig. 11, steps 1108, 1112; fig. 8, steps 819, 821). Attwood does not disclose negotiating for a security association if one has not been established. Nikander discloses a key manager using the ISAKMP/Oakley protocol for negotiating a security association for a connection based on a security policy (col. 4, lines 38-40; col. 5, lines 33-40; col. 6, lines 33-37). It would have been obvious to one of ordinary skill in the art at the time the invention was made modify the method of Attwood such that a security association is negotiated if one is needed and has not been established, as suggested by Nikandar. The motivation for doing so would have been that security associations could be negotiated as needed for IPsec processing.

Regarding claims 2 and 21, Nikander key manager meets the limitation of an IKE component.

Regarding claims 3 and 23, Attwood further discloses that the security association is based on at least one of a source IP address, a destination IP address, a protocol, a source port, and a destination port (col. 6, lines 13-18).

Regarding claim 4, Attwood further discloses that the protocol comprises one of TCP, UDP, ICMP, and IGMP (col. 6, lines 22-23).

Claims 5 and 22 are rejected on the same basis as claim 1.

Regarding claim 6, Attwood further discloses retrieving the security association from a database (col. 6, lines 40-42).

Regarding claim 7, Attwood further discloses that the database contains mapping between network flow information and security associations (fig. 5).

Regarding claim 8, Attwood further discloses that the network flow information comprises at least one of a source IP address, a destination IP address, a protocol, a source port, and a destination port (col. 6, lines 13-18).

Regarding claim 9, Attwood further discloses retrieving the security policy from a database (fig. 5).

Regarding claims 10-12 and 24-26, Attwood disclose a method comprising:
monitoring application socket requests (col. 12, lines 7-12);
requesting transmission of UDP data on a socket by an application (col. 12, lines 7-12);

intercepting the transmission of UDP data on a socket by the application (fig. 13, steps 1308, 1312; fig. 8, steps 819, 821, 826);

determining if the socket has been associated with a security rule information binding, which meets the limitation of an active security association (col. 4, lines 4-17 and fig. 13, step 1302);

determining if there is a defined security association that may be used to protect the network flow if the socket has not been associated with any active security association (fig. 13, steps 1308, 1312; fig. 8, steps 802-818);

allowing the UDP data to be sent (fig. 13, step 1310; fig. 8, step 826).

Attwood does not disclose the steps of: determining what security policy should be used when negotiating a security association for the network flow if there is no defined security association that may be used to protect the network flow; alerting a security association negotiation component to initiate negotiation for a security

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association using security parameters specified by the security policy if the security policy exists for the network flow; and establishing the security association. Nikander discloses a policy manager, the policy manager determining what security policy should be used when negotiating a security association for the network flow if there is no defined security association that may be used to protect the network flow (col. 4, lines 60-64; col. 6, lines 26-32); a key manager using the ISAKMP/Oakley protocol, which meets the limitation of the security association negotiation component; and the step of a policy manager alerting the key manager to negotiate a security association using security parameters specified by the security policy and establishing the security association (col. 4, lines 38-40; col. 5, lines 33-40; col. 6, lines 60-67). It would have been obvious to one of ordinary skill in the art at the time the invention was made modify the method of Attwood to use a policy manager and a key manager, and to include the steps of determining what security policy should be used when negotiating a security association for the network flow if there is no defined security association that may be used to protect the network flow; alerting a security association negotiation component to initiate negotiation for a security association using security parameters specified by the security policy if the security policy exists for the network flow; and establishing the security association, as suggested by Nikandar. The motivation for doing so would have been to negotiate and establish a security association as needed for IPsec processing. Accordingly, once the security association is established, the UDP data is processed according to the established security association and transmitted.

Regarding claim 13, Attwood further discloses that the second determining comprises comparing filters with at least one of a source IP address, a destination IP address, a source port, and a destination port related to the network flow (col. 6, lines 13-18).

Regarding claim 14, Attwood further discloses that each filter comprises at least one of a source IP address, a destination IP address, a protocol, a source port, and a destination port (col. 6, lines 13-18).

Regarding claim 15, Attwood further discloses that the security policy comprises one filter (fig. 5).

Regarding claim 16, it is interpreted as "determining if the packet can be allowed to be transferred in the clear without a security association" (see fig. 5, step S34; and page 12, lines 3-5). Attwood further discloses that a packet is allowed if IPSEC is not required (fig. 8, step 812).

Regarding claim 18, Attwood further discloses that the network flow information comprises at least one of an IP addresses, protocol, ports (col. 6, lines 13-18).

Regarding claim 19, Attwood further discloses a component being responsible for performing IPSec processing on incoming and outgoing packets (fig. 1, elements 101, 103).

Regarding claim 27, Attwood does not disclose that the active security association comprises a security parameter index (col. 6, lines 40-42), which comprises at least one of a source IP address, a destination IP address, a protocol, a source port, and a destination port.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dinh whose telephone number is 571-272-3802.

The examiner can normally be reached on Mon-Fri: 10:00am-6:30pm.

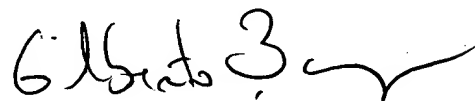
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MD

Minh Dinh
Examiner
Art Unit 2132

MD
7/11/05



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